

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION

Project Title: West Patagonia Water Developments	Project No.
Region/GMU: V / 35B	HPC: Tucson
Project Type: Water Development	
Project Description: Supply dependable, perennial wildlife water to approx. 29 sections of land (18,560 Acres) on the west side of the Patagonias by tying into 4 existing wells, developing two wells, adding approx. 15 miles of pipeline, 7 storage tanks and 23 troughs. These troughs will be available to both livestock and wildlife. The whole project is divided up into three phases. With this application we are seeking funds to cover the costs of 7 miles of 267 psi NuMex polypipe which is the pipe needed for Phase 1. Other costs for drilling wells, storage tanks, troughs and labor may come from money and labor from local ranchers, Forest Service funds and through the AZ Dept. of Ag. LCCGP, NRCS EQIP, AZGFD Hunter Donations and NWTF's Guzzlers for Gobblers grant programs and others.	
Wildlife Species to Benefit: Coues deer, quail, Gould's turkey and non-game species.	
Possible Funding Partners:	
Implementation Schedule: Beginning: July, 2007 Completed: Nov., 2009	

PROJECT FUNDING

SBG Funds Requested: \$ 25,130
Cost Share Funds: \$ 171,216
Total Project Costs: \$ 196,349

PARTICIPANT INFORMATION

Applicant: Doug Hardy (please print) Telephone: 520-378-2805	Address: Sierra Vista Ranger District 5990 South Hwy 92 Hereford, AZ 85615
AGFD Contact and Phone No. John Millican – 520-803-7535 (If applicant is not AGFD personnel)	
Coordinated with: John Millican – AZGFD, Al Eiden – AZGFD, Brian Dolan – Tucson HPC Chairperson, Scott Lerich – NWTF, Bob Heilig – Double Bar R Ranch, Dwayne Thwaits – Consultant, Forrest Metz – T-4 Ranch, Tom Skinner – USFS, Tom Lorenz – USFS, Kent Ellett – USFS.	Date: 03/06/07
Applicant's signature: /s/ Douglas Hardy	Date:

SEND COMPLETED APPLICATIONS TO:
Game Branch
2221 W. Greenway Rd.
Phoenix, AZ 85023
mdisney@azgfd.gov

NEED STATEMENT/PROBLEM ANALYSIS:

With the exception of a well that provides water to two troughs in the extreme southwest corner of the project area, water in this area can be limited and sporadic, often confined to a few springs, small ephemeral stretches and stock tanks when there is sufficient precipitation to run and store water. Stock tanks can be dry during times when water is needed most.

PROJECT OBJECTIVES:

Supply dependable, perennial wildlife water to approx. 29 sections of land (18,560 Acres) on the west side of the Patagonias.

PROJECT STRATEGIES:

NEPA is being completed for this project with a final decision scheduled for next month - April, 2007. Concurrent with this grant application, the T4 Ranch and the Double Bar R Ranch are submitting grant applications for the ADA LCCGP to cover the costs of Phase 1 and a portion of Phase 2. NRCS – EQIP grant applications will be submitted in Nov. 2008.

Phase 1 – 2007:

- The North portion of Ole Timer well (existing well #1) drilled in 2005 on the “Ole Timer” parcel in T23S, R15E, Sec 2 SW. This involves solar panels at the well, two 5,000 gallon (5K) storage tanks, 4 miles of pipeline and 8 troughs.
- Javelina Well (existing well #2): A 5K storage tank ,1 mile of pipeline and 2 troughs will be added to Javelina Well in T23S, R15E, Sec 22.
- Hog Canyon (existing well #3): A 1 ¼ mile pipeline and trough will be added to an existing pipeline in T23S, R15E Sec 27 and fed from an existing well in Providencia Canyon.
- Soldier Basin (existing well #4): Replace a ¾ mile pipeline, 5K storage tank and trough to the Soldier Basin well in T23S, R15E Sec 13.

Phase 2 – 2008:

- Complete the South portion of Ole Timer Well (existing well #1) by adding a 2 ½ mile pipeline and 3 troughs.
- A well (new well #5) will be drilled at the “Lucky Find” parcel in T23S, R15E, Sec 10. This well will provide water to two pipelines, one 2 miles and one 1 mile in length, a 5K storage tank and 5 troughs. One of the pipelines will run next to a AZ Game & Fish Dept. Trick Tank that the AZGFD often hauls water to. We will be able to extend a lateral line to the Trick Tank and eliminate the need to haul water.

Phase 3 – 2009:

- The Jackalo Mine test well (new well #6) will be converted to a water well in T23S, R15E, Sec 30 NE. This well is located at Red Hill, south of Guajolote Flat. It will feed two 5K storage tanks, 3 miles of pipeline and 3 troughs.

PROJECT LOCATION:

Location is the western side of Unit 35B, south of Patagonia and East of Highway 82 in Santa Cruz County. The proposed water developments will provide dependable water for wildlife across approx. 29 sections of land or 18,560 acres with the actual wells, pipelines and troughs located in:

T.23S., R15E., SEC 33, 34

T.23S. R15E., SEC 2, 3, 4, 9, 10, 11, 22, 25, 26, 27, 28

T23S., R16E., SEC 30.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

The existing Ole Timer well and the new Lucky Find well are located on small private land in-holdings owned by Metz Trust, owner of the T-4 Ranch.

The existing Providencia Canyon well that feeds the Hog Canyon pipeline extension is on private land owned by Robert Heilig of the Double Bar R Ranch.

The remaining 3 wells are located on Forest Service lands. With the exception of the two troughs at the Ole Timer and Lucky Finds well sites, all other troughs will be located on Forest Service Lands.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT? No

HABITAT DESCRIPTION:

Broadleaf evergreen woodland is the dominant vegetation type in upper elevations in the project area. Lower elevations are semi-desert grasslands. In the 1950's, Lehman lovegrass (*Eragrostis lehmanniana*) was seeded following mesquite removal in the lower elevations and is the dominant understory species.

Drainages include Fresno, Canada de la Paloma, Providencia, Wild Hog, Maggie's and Three R Canyons. For the most part, drainages run seasonally in response to precipitation events, with water persisting year round in only a few locations. Vegetation associated with stream courses is a mixture of evergreen oaks and deciduous riparian trees, primarily sycamore and mesquite.

The project covers a large area which provides year-round habitat to the benefited species.

ITEMIZED USE OF FUNDS:

The tables on the following page summarize the estimated costs for each phase of the project and the amount requested from HPC. Seven spreadsheets with detailed cost breakdowns are also attached.

Phase	Project Units	Personnel	Supplies	Labor	TOTALS
1	Hog Canyon pipeline extension	\$200	\$5,430	\$1,000	\$6,630
1	Soldier Basin Well System	\$200	\$6,460	\$1,400	\$8,060
1	Javelina Well System	\$400	\$16,274	\$2,400	\$19,074
1 & 2	Ole Timer Well System	\$2,800	\$71,162	\$7,000	\$80,962
2	Lucky Find Well System	\$1,400	\$41,936	\$12,900	\$56,236
3	Jackalo Well System	\$1,000	\$19,187	\$5,200	\$25,387
TOTALS		\$6,000	\$168,649	\$29,900	\$196,349

HPC funds for Phase 1 pipe	Feet of pipe	cost/ft	Total
North portion of Ole Timer Well	21,120	0.68	\$ 14,362
Javelina Well System	5,280	0.68	\$ 3,590
Hog Canyon Pipeline Extension	6,600	0.68	\$ 4,488
Soldier Basin Well System	3,960	0.68	\$ 2,690
	36,960		\$ 25,130

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Arizona Department of Agriculture (ADA) Livestock Crop & Conservation Grant Program (LCCGP): Concurrent with this application, both the T4 Ranch and the Double Bar R Ranch are applying for LCCGP grants through the ADA for approx. \$50,000 each. These applications are due March 16, 2007 with notification of grant awards occurring in July, 2007.

Arizona Game & Fish Department: The Department as verbally committed \$10,000 this fiscal year for the project this fiscal year and another \$10,000 next fiscal using Hunter Donation Funds.

NRCS: Grants through the Environmental Quality Incentives Program: Applications are due in November.

National Wild Turkey Federation: Guzzlers for Gobblers Program.

T-4 Ranch: Applying for other grants, labor and oversight of drilling the Lucky Find well and installation of the Ole Timer and Lucky Find solar panels, storage tanks, pipeline and troughs. The T-4 Ranch drilled the Ole Timer well in 2005 at a cost of \$11,000.

Double Bar R Ranch: Applying for other grants, labor and oversight of completing the Jackalo Mine well and installation of solar panels, storage tanks, pipeline and troughs for the Jackalo, Javelina and Soldier Basin wells and the Hog Canyon pipeline extension.

Forest Service: Project oversight, ordering of materials and preparation of a Term Grazing Permit Modification specifying how construction of the improvements will be accomplished. A few thousand dollars may be made available for each phase using range betterment funds.

PROJECT MONITORING PLAN:

Completion of tasks by agreed upon timelines and quality of work will be monitored by Sierra Vista RD Rangeland Management Specialists and/or Contracting Officer Representatives and administered through Permit Modifications.

PROJECT MAINTENANCE:

The improvements will be added to Part 3 of the ranchers Term Grazing Permits with the ranchers assuming maintenance responsibility with regulatory enforcement and oversight by the Forest Service.

PROJECT COMPLETION REPORT TO BE FILED BY:

Tom Lorenz, Rangeland Management Specialist, Sierra Vista Ranger District

WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):

ARIZONA GAME AND FISH DEPARTMENT
WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Oak Bar / Santa Cruz Water Development

- 1) **Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"** No
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie on 03/06/07
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
 2-4 4-6 6-8 8-10 10-12 12-14 X 14-16 >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
 X YES (please complete #5 below) NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source: Various. See project map.
Type of water source (catchment, spring, dirt tank, etc.): Various springs, stock tanks, ephemeral drainages and wells.
Ownership of water source: Private and Forest Service.
Distance in miles from project: Varies
- 6) **Is the target wildlife species a result of transplant efforts?** X YES NO The Goulds Turkey.
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**
Two wells will be located on small private land in-holdings owned by Metz Trust. The remainder of the project is Forest Service lands.
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): 2x4 vehicles X 4x4 only X foot only**
**If foot access only: Distance in miles: Approx. hiking time:
The well sites and a few troughs are available by vehicle. The rest is overland travel by foot or horseback.

-- Does access to this site require crossing private or tribal lands? X YES NO

-- Please describe any restrictions to public access: None
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
See Attached Spreadsheets.
- 10) **Was a site visit completed?** X Yes No Several site visits by the ranchers and Forest Service personnel have been conducted as well as coordination with AZGFD.

MAIL COMPLETED PROJECT COMPLETION FORM TO:

**Game Branch
Arizona Game and Fish Department
2221 W. Greenway Road
Phoenix, AZ 85023**

**E-mail to:
mdisney@azgfd.gov**